THE

MEDICAL AND SURGICAL REPORTER.

No. 819.] PHILADELPHIA, NOV. 9, 1872. [Vol. XXVII.—No. 19.

Original Department.

Communications.

THE MIND AND THE BODY.

By J. Ritter, M. D.,
Of Liverpool, Pa.
President of the Perry county Medical Society.

We purpose illustrating the modes in which the mind has a controlling influence over the body. This is produced through intellectual, or nervous sympathy. Sympathy is of a three-fold kind. Intellectual, Natural, and Social. Dr. Burns, of Glasgow, says: "in the whole economy of nature we can see the wisdom of the *Creator*. But in no part more than in the sympathy of association; it does not only run through individuals, but, also through nations." But what is sympathy? It implies interest, a fellow feeling, affinity, etc. Natural Philosophy teaches, as the learned Webster has said, that there is a certain sympathy, a propension, in all nature, even in inanimate articles; hence the loadstone and iron, the magnetic needle, etc.; but in animate creation, intellectually, it is produced by thought; naturally and socially, through the nerves and affections. The nerves, according to medical pathology, are very essential to man, and have much to do with the nutritive system and reproduction, they are profusely scattered over the human system. The English schools teach that there are 49 pairs, and the French, that there are 52 pairs. These nerves are a general band, consisting of fine tapes or fibres, or, if you please, cords, containing a fine vital medulla fluid, through which organic impressions are made. They are said to be the intermediate link that connects the soul and body. Hence we are taught that man is a compound being, consisting of soul, body, and spirit.

The learned and eloquent Dr. B. Richardson, of London, beautifully shows that this gaseous, or vaporous atmosphere of vital nervous matter, is the spirit of man, and then explains his multifarious phenomena of organic life and mental activity. He also shows that they are subject to impression, not only from one kind of impulse, but from any kind to which it may be subjected, viz: calorific, mechanical, electrical, chemical, or to all causes of vibratory motions, etc. It is said by our Professors of Medicine, that it is the Ganglionic, the fifth, sixth, and eighth pairs, that connect directly with the viscera and great sympathetic nerves, which makes the direct impression on the conscious brain.

Hence, in contusion of the *brain*, the *stomach* is nauseated, and in case of dyspepsia, where the stomach is morbid, and the gastric and pancreatic juices do not harmonize and perform their proper part, there are sick headache and an irritable mind. These nerves anastomose. They are supplied by the *brain*, cerebellum, medulla, etc.

The muscles are conductors of sound (according to Prof. *Tallaposy*, of Paris), whilst the nerves are conductors of impressions by thought, a blow, touch, or affection. The *nerves* are strongly affected in cases of joy and prosperity, and in cases of sickness and adversity, until all the nerve centres become excited or prostrated, until tremors, mania, and not unfrequently suicide follows. Hence the importance of directing our thoughts and affec-

tions properly, and of bracing up every nerve to its proper capacity. Dr. Tuke has some lucid observations "on the influence of the mind upon the body." 1st. In the *Journal of Mental Science*, where he says, thought strongly directed to any part tends to increase its vascularity, and consequently its sensibility. Associated with a powerful emotion, these effects are more strikingly shown, and, when not directed to any special part, an excited emotional condition induces a general sensitiveness to impressions; an intolerance of noise, for example, or cutaneous irritation. 2d. Thought strongly directed away from any part, especially when this is occasioned by emotion, lessens its sensibility. The activity of the cerebral functions during deep intellectual operations excludes consciousness of the impressions made upon the sensory nerves generally, and an absorbing emotion effectually produces the same result. 3d. The motions may cause sensations, either by directly exciting the sensory ganglia and the central extremities of the nerves of sensation, or by inducing vascular changes in a certain part of the body, which changes excite the sensitive nerves at their peripheral terminations. 4th. There is no sensation, whether general or special, excited by agents acting upon the body from without, which cannot be excited also from within, by cerebral changes (including those associated with emotional excitement) affecting the sensory ganglia.

A CASE OF IDIOPATHIC TETANUS.

By William Ekwurzel, M. D.,
Of Frankford, Pa.

John S., aged 48, laborer, intemperate, a strong, hardy man, who, with the exception of two attacks of delirium tremens, had had no illness since he was a child, on September 12, after working hard in a brick yard, and feeling warm and tired, lay down under a brick shed and went to sleep, a fresh breeze playing over his body. When he awoke he felt chilled and stiff. The next day his bones ached, and he felt quite stiff about the neck, but would have worked if the weather had permitted. Worked on the 14th, and went to church on the 15th, still growing worse. On the 16th, feeling unable to leave the house, he sent for his physician (?), a homœopath, who applied mustard to the whole length of the spine *ad vesicationem*.

When I was called in on the 19th, just one week from the time he took his cold nap, I found him sitting in a rocking chair, with his head drawn firmly back against the chair back; all the muscles except those of the arms, tense and rigid. He was only able to separate the teeth to the extent of $\frac{1}{8}$ inch; articulation was consequently difficult, still he could make himself understood. The skin about the mouth seemed drawn tightly, and the corners of the mouth were retracted. The "sardonic grin" was well marked, but there was no decidedly anxious or distressed look about the face. Deglutition was somewhat painful, but not enough to interfere with the taking of nourishment. He said he was hungry, and avowed his ability to eat a "square meal" if he could only get it into his mouth to masticate it. The abdominal muscles were very tense and rigid, feeling like hard, unyielding boards; and a like rigidity pervaded the muscles of the neck, back, and lower extremities. As he was sitting, he could, with great difficulty, raise each foot a short distance from the floor, but was unable to stand or walk. At intervals of from five to ten minutes he was seized with severe spasms, attended with hurried respiration, and a straining groan during expiration, reminding me very much of a woman in labor. Indeed, his wife habitually spoke of the spasms as "pains," saying, for example, that when she attempted to give him anything it always brought on a "pain." He complained much of a severe and constant pain at the epigastrium, greatly intensified during the spasmodic seizures. The spasms were of short duration, lasting but two or three minutes. When they passed off, the perspiration stood in large drops upon his hands and face. They came on whenever the patient attempted to speak, or was spoken to or touched, and were attended with much pain. Inspection of the back revealed (as a result of the mild and humane efforts of homœopathy), a space about eight inches wide, extending from the base of the neck to the sacrum, burnt to a deep scarlet, and blistered in places. There was no derangement of the intellect; no headache; pupils normal; pulse 72, of good force and volume. The sphincters were under complete control.

Directed the patient to be placed in bed and kept perfectly quiet; to have as much beef tea and milk punch as he could be induced to swallow; and to take 20 grains of bromide of potassium every three hours. Before deciding

on the relative merits of chloroform, chloral, calabar bean and lobelia, I called on Dr. F. F. Cassaday, and requested him to see the case with me. At 3 P. M. we found the patient in about the same condition. Ordered a teaspoonful of the following mixture every hour and a half:—

℞—Tincturæ lobeliæ,
Tincturæ hyoscyami, āā ʒij. M.

Continue the bromide and nourishment.

Sept. 20th, 3 A. M. Called in haste, the messenger stating that the patient was much worse. On reaching the house I learned that he had had two severe spasms, each one lasting about ten minutes. The jaws were now firmly locked, the patient being unable to separate the teeth. When he was spoken to, or touched, he had spasms of short duration. All at once he went into a most violent opisthototic spasm, which continued for ten minutes. The body was completely arched from the sacrum to the occiput, while the extended extremities were the seat of incessant trembling or twitching movements. Sitting with my hand resting on the bed, I found that the whole bed was thrown into vibration by the host of contracting muscles contending fiercely for the mastery over each other. When the spasm subsided, he complained greatly of the pain, and declared that he would have shot himself at the start, if he had known he had to suffer so much. I at once gave a double dose of the lobelia mixture, and gave chloroform by inhalation for twenty minutes, but did not bring him fully under its influence. Ordered whiskey to be freely given.

10 A. M. Saw patient in company with Dr. Cassaday. There had been no more severe spasms, but frequent light ones. No nausea. Gave a hypodermic injection of morphiæ sulph. gr. ¼, and directed that the lobelia be given every hour.

5 P. M. Had been nauseated, and vomited a little, after which he had slept occasionally, and felt comparatively comfortable. No more severe spasms. The bowels had not been moved since the 18th; breath extremely offensive. Ordered one of the following pills every three hours:—

℞—Ol tiglii, gtt. j.
Ext. jalapa, gr. vj.
Hydrarg. chlor. mit., gr. xij. M.
Ft. pil. No. iv.

21st, 3 A. M. Pulse irregular, running from 60 to 120 and back, within the space of a few minutes. Spasms light, but frequent; muttering delirium; carphologia; abdomen tympanitic. No effect from the pills. Ordered an enema; other treatment continued.

10 A. M. Meeting Dr. B. H. Deacon near the house, I invited him to see the patient with Dr. Cassaday and myself. The enema had been followed by a free evacuation. Pulse 72; teeth firmly clenched; spasms frequent, but not severe nor of long duration. The abdominal (and other) muscles were still rigid. Continue the lobelia, increase the bromide to 30 grains every two hours, and, to combat the tendency to depression, 24 grains of the sulphate of quinia in the twenty-four hours. Gave stringent orders regarding the administration of beef tea and whiskey, as there were grounds to fear that the treatment in this respect had not been faithfully carried out.

P. M. Resting with some comfort, but has occasional short spasms. Trismus unyielding; breath very offensive; carphologia persistent, with occasional muttering. On account of the typhoid condition into which the patient was apparently drifting, I discontinued the lobelia mixture. Other treatment continued.

22d, A. M. To prevent repetition, I will here state that Dr. Cassaday kindly saw the patient with me every morning, and gave me the benefit of his experience with the disease. The patient could now turn the head from side to side much more freely than heretofore; was also able to articulate more distinctly, and the face presented a more natural appearance. The abdominal muscles were somewhat softer, and began to play a little during respiration. The muscular rigidity was so great in the lower extremities that they were almost immovable. He complained much of severe pain in the hip and knee joints. At 5 P. M. on the preceding day, morphiæ sulph., gr. ¼, was given, on account of the frequently recurring spasms, and the great pain attending them. This had no appreciable effect, the spasms continuing with great frequency until 1 A. M., when they ceased in a great measure, and the patient enjoyed comparative quiet, with refreshing sleep, broken, however, by an occasional spasm. Treatment continued; also ordered chloroform fʒss in emulsion.

P. M. Spasms frequent, but short. The chloroform had had an exciting effect; directed fʒj to be given. The patient was continually

muttering to himself, and grasping at imaginary objects in the air.

23d, A. M. Abdominal muscles still softer; spasms farther apart; patient quiet. Had been in wild delirium during the night, talking incoherently about his work, and attempting to get out of bed. Discontinued the chloroform; continued quinia and bromide; also ordered magnesiæ sulph. ℥j in divided doses, until the bowels should move.

24th. Spasms recurring more frequently, of longer duration, and more painful; has had three evacuations; complains loudly of pain in the hips and loins; subsultus tendinum and carphologia persistent; had been very delirious during the night. Directed that the painful joints and muscles be rubbed with the following liniment:—

℞—Ol cajuputi,
Chloroformi, āā f℥j.
Camphoræ, ℥vj. M.

25th. Skin not so moist. Up to this time the patient's clothing had been literally dripping with sweat. Spasms more severe and painful.

℞—Tinct. lobeliæ, f℥ij.
S. One teaspoonful every hour.

26th. Has taken all the lobelia, but has felt no nausea. No improvement as regards the spasms. I now gave half a grain of tartar emetic every hour, combined with morphia, but with no effect. The next day it was increased to one grain, the morphia left out, and wine of ipecac substituted. This was continued for twenty-four hours without producing any nausea. He continued delirious at night, with but little improvement in the tetanic symptoms until the 30th, when there was such a marked feebleness of pulse that we placed him on frequent doses of spir. ammonia aromat. and brandy.

Oct. 6th. Gradual improvement. The attendants had been able to flex the thighs sufficiently to prop him up in a semi-sitting posture in bed; no delirium; muscular rigidity slowly but steadily fading out.

10th. Able to walk across the room, but very stiffly and awkwardly, and must have an attendant to lean on for support.

19th. Able to go down stairs and to walk around the yard. Still stiff about the hips and knees, and has a light spasm on waking in the morning, as if this nervous irritability accumulated during sleep.

25th. Has no more spasms, and but little stiffness. Appetite good, and he feels strong and well as ever.

I have reported this case thus far, not for the purpose of lauding the wonderful effects of any particular remedy or line of treatment, but rather to show how utterly inert all remedies proved. In truth, as Dr. Cassaday humorously remarked, the only drug that seemed to exert any positive and undoubted effect, was the sulphate of magnesia. The large doses of quinia, 24 grains daily, continued for two weeks, produced none of the toxic effects of that drug. The average daily quantity of bromide of potassium was ℥ss, continued over two weeks, then gradually diminished.

Lobelia and antimony had no effect at all after the first dosing with lobelia.

If the calabar bean had been obtainable, I should have tried it, and probably accorded it all the praise. As it is, I attribute more good to the increasing administration of nourishment than to anything else.

Before concluding, I would call attention to one point, the pain in the hip and knee joints. In looking over the authorities I have at hand, I have been unable to find any mention of such pain; still, in this case it was a prominent, and to the patient a very troublesome, symptom. I think it was caused by the long-continued and forcible contraction of the evenly balanced muscles, grinding the articular surfaces against each other, as each set of muscles gained, alternately, a momentary mastery over the opposing set. Or, it may simply have been of the nature of the rheumatoid pains so often seen in various affections of the nerve-centres, and which are also, as in this case, attended with profuse acid sweats. Still, the fact of these pains occurring in the joints of the lower extremities, which were affected with spasms, and not in those of the upper extremities, which were not affected, would tend to show that they were due to the cause first mentioned.

EFFECTS OF QUININE UPON THE UTERUS.

By F. K. Bailey, M. D.,
Knoxville, Tenn.

We often see articles in the Medical Journals upon the Oxytocic effects of sulph. quinine. The inference is that some practitioners consider it unsafe during pregnancy. For many

years my field of practice was in a region of country that was extremely miasmatic; for nearly half the year whole neighborhoods of people were prostrated by intermittent and remittent fevers. As a natural consequence, the sickly season would find more or less women pregnant.

The result of much and continued observation in the use and effects of sulph. quinine was, that whenever the agent was indicated as an antiperiodic it was freely and fearlessly exhibited. It was very common to find a pregnant woman suffering from uterine pain during a fit of ague, and abortion or premature labor often occurred in cases when timely antiperiodic treatment could not be carried out. In all such cases it was my practice, as well as that of others, to administer quinine promptly and freely. There was no other way to carry a patient over such a period of danger, except to suspend the periodical tendency.

Again, the question is often asked, is quinine admissible or ever indicated during labor, to regulate the expulsive efforts of the uterus? In answer to this I can say that in very many instances during labor occurring in the summer or autumnal months, I have given quinine with the most happy effects. It was often the case that natural labor at term was ushered in by a chill, and the depressing effects of malaria would render the pains feeble and without expulsive power. At this juncture a full dose of quinine would equalize the circulation, and render contractions more forcible.

The conclusion, then, is, that sulphate of quinine may be considered safe in all conditions of the system where it is indicated as an antiperiodic. Although its modus medendi may not be fully explained, still it is probable that its action is principally directed to the spinal system of nerves.

Untimely uterine pains, either so slight as to be merely annoying, or so energetic as to endanger abortion, are pathological, and can only be obviated by appropriate remedies; whereas *timely* efforts are physiological, and may require, sometimes, the aid of the same remedy to promote them which in the other case will suspend them.

There are analogous conditions of the system, in which malarious poison will produce dysentery, readily curable by antiperiodics.

Again, there are morbid conditions from paludal causes, in which there is torpor of the intestinal canal. Quinine, in my hands, has often acted as an evacuant in such cases, and the practical lesson taught is, that we should ascertain the true pathological condition under which our patients labor, and prescribe remedies that are indicated to remove that condition, however paradoxical it may appear to a superficial observer.

ON LIGATION OF THE FUNIS.

By Hiram Corson, M. D.,
Of Conshohocken, Pa.

In the Reporter of October 12th, Dr. A. F. A. King has "remarks" on a report of mine to the Medical Society of the State of Pennsylvania, in which he angrily accuses me of misrepresenting him in my paper on "Ligation of the Funis". I regret that Dr. King should feel aggrieved I intended no disrespect to him when I said I could not see a word of truth in a certain paragraph. I did not mean that he had deliberately asserted what he knew to be false, but, merely, that *to me* it did not seem to be true. And so with his facts; to me they were not facts, and therefore I called them his pretended facts, not doubting at all that he believed them, but imputing to him want of correct knowledge on the subject. As regards the word "strictly," I do not know why it was left out; possibly I thought it superfluous, or perhaps by mistake. If I were to say Dr. King is an honest man, would it not be as proper as to say Dr. King is a strictly honest man? I may be dull of comprehension, or may have a strange "manner of understanding English," as suggested by Dr. King, but even he will hesitate to think me base enough to pervert the meaning of his article to bring reproach upon him. When, a few years ago, Dr. King's essay was published, I read it carefully, and was so struck with its errors that I concluded it must have been written by a very inexperienced person. Instead, therefore, of mortifying him by writing a criticism of it for publication in a Medical Journal, I addressed a letter to him, and pointed out the errors, with the hope that he would come to see and acknowledge them; I afterwards visited him at his home, and again called his attention to the errors into which he had fallen, and also told him that I had prepared a brief paper on the subject for our "Transactions." I have, in another place, thanked Dr. King for calling atten-

tion to this subject—Ligation of the Funis—inasmuch as it was one about which I had not thought much, but had followed the usual custom.

Dr. King is an ambitious, energetic, young man, and I feel kindly towards him; but no feelings of friendship for him, or any other man, in high or in low places in the profession, shall prevent me from attempting to expose their false theories and pretended facts. I was as careful not to say an offensive word to him when he was plain Dr. King, as now, when he is all ablaze with titles. But, *strictly* speaking, it is more important to correct his errors now, than then. As a teacher he may communicate them to his pupils as truths, and thus do infinite mischief. As but very few of your readers have access to the "Transactions of the Medical Society of the State of Pennsylvania," in which my paper is printed, I send you for publication that part of the Montgomery county Report which is headed "Ligation of the Funis," so that they may see whether I have unjustly criticised Dr. King's essay.

In our report for 1869 we referred to the essay of Dr. King, of Washington City, on this subject, and showed the error of his belief that after the birth of the child the blood flows *from* it to the placenta, through the umbilical vein, and that in that way the surplus blood, with which he thinks the child is oppressed and its organs engorged, gets out of its body, and to facilitate which, he advises that the cord be quickly cut, so that the blood may flow *from* the umbilical vein. This we showed to be a palpable error, inasmuch as no blood can flow from the child through the umbilical vein to the placenta, for the reason that that vein or vessel carries the blood the other way, from the placenta *to* the child. We also showed the propriety of waiting—neither cutting the cord, nor tying it—until pulsation in the cord had ceased, and all the blood contained in the vessels of the cord and placenta had passed into the body of the child, to whom it belonged, not one drop of it belonging to the mother. We claimed, too, that it would be very wrong to either cut or tie the cord quickly after the birth of the child, as either operation would deprive the infant of some ounces of blood which properly belong to it, and which it always gets, provided no hasty and officious interference prevents it. In conversation with physicians, since that time, I have been surprised to find that some of them do not comprehend the facts in relation to the subject. Some thought the blood in the cord and placenta was the mother's blood, and a few had regarded the operation of putting a ligature on the maternal end of the cut cord as a precaution to prevent blood being drained away from the mother. One physician argued strongly that the blood which flows in the child's body comes directly from the vessels of the mother, through the umbilical vein, to the child, and, after circulating there, goes back through the umbilical arteries of the child and the cord to the mother, and mingles with her blood. Another eminent physician held the same opinion. As already alluded to, some believe that hemorrhage may take place through the cord, from the mother. Drs. Neill and Smith, in their *Compendium*, favor this idea. At page 534 they say: "The two ligatures are useful in case of twins, which sometimes have a common placenta." A friend has also told me that a professor of obstetrics, to whom he applied for information, said it was a proper precaution. Dr. Horace Smoot, of Virginia, who in an able review of Dr. King's *Essay* disproved many of his pretended truths, himself seems to be in a grievous error. On page 65, *Med. and Surg. Reporter*, Jan. 22, 1872, he says: "As soon as the cord ceases to pulsate, we know from that fact that all superfluous blood, if there should be any that might interfere with the establishment of respiration by a congestion about the heart and lungs, has been gotten rid of and found its lodgment *in the cord and placenta*." It is lamentable that intelligent physicians should hold such opinions, and inculcate them. Tie the cord of the first child, in a case of twins, for fear that the mother's blood, or the blood of the other child, should come streaming through it! Talk about superfluous blood being driven back from the child and finding a lodgment in the cord and placenta! Assert that the blood of the mother circulates in the child's! Why, have we learned nothing? Does Physiology teach us thus? No. Shall we, on such erroneous opinions, whether inculcated by teachers or writers, found a practice, and quickly tie the cord, or cut the cord to avert supposed dangers? I hope not. But, to return to Dr. King. He says: "Every infant, except those precipitated by a single pain, comes into the world in a state of partial or incipient apnœa. Venous blood predominates over the arterial, and exerts its sedative influence upon the brain and nervous centres; and of this arrangement we observe the utility, in that it prepares the delicate and susceptible nervous system of the infant to withstand the shock, by light, sound, etc., so suddenly impressed upon it as it emerges from the silence and darkness of the uterine cavity, into the noise and light of the world. If the keen susceptibilities of the infant were not thus obtunded, by the sedative influence of unaërated blood, then we should not be surprised to see every new-born child ushered into the world with a convulsion. That children always *are* born in the condition of incipient apnœa, is plain. At birth, and for a certain period prior to it, the circulation of blood through the placenta has in part or wholly ceased; *this we know, for the fœtal pulse felt in the cord no longer* reaches

the placenta." Dr. King, at the time of writing the above, had attended but very few cases of labor. In looking at the above quotation, I cannot see one word of truth in it, and I believe greater experience will cause him also to see his errors. At page 32 of his pamphlet, he asks, "Is it natural and proper that the cord should pulsate, and pulsate strongly, and throughout all or a greater part of its length, after the child is expelled?" And he answers, "We think not." My experience in thousands of cases proves Dr. King's opinions to be quite erroneous. I doubt not that the heart beats steadily and sends the blood regularly to the placenta, and receives it steadily, through the umbilical vein, during every part of the labor. Hundreds of times have I seen children born after hours of terrific pains, and yet the instant they came into the world they yelled furiously, and the pulse was beating violently. Dr. King having awakened my attention to this subject, and some of my neighboring physicians having practiced cutting the cord quickly, I resolved to observe more carefully than before the operations of nature after the birth of the child, to see what would take place if we should not interfere; and in the following cases noted the length of time that the cord continued to pulsate, 1st, near to the placenta; 2d, within an inch of the navel; and 3d, in the umbilicus itself.

Case 1. Healthy male child. Cord pulsated inside vagina 10′ (ten minutes), within one inch of navel 25′.

2. Male. In vag. 10′, then placenta was delivered, after which pulsation was felt an inch from the navel 5′ longer.

3. Female. In vag. 8′, near navel 14′.

4. Male. In vag. 12′, near navel 16′.

5. Male. In vag. 20′, at navel 45′. In one week it had jaundice.

6. Male (delivered with forceps). No pulsation in cord for one minute, then came in half its length, ceased in the cord at the navel in 10′, and was felt in the umbilicus 3′ longer.

7. Female, first child. In vag. 9′, near navel 14′, in umb. 19′. Pulsations at birth 160 in a minute.

8. Female. In vag. 6′, near navel 11′, umbilicus 19′. At birth the pulsations were 144 per minute; after they ceased in the cord, were 144 in the umbilicus.

9. Female (easy labor). None in vag., 1′ near navel, 9′ in umbilicus.

10. Male (slow but easy labor, inhaling ether many hours). None in vag., 2′ at navel, 9′ at umbilicus.

11. Male. In vag. 2′, near navel 15′, in umb. 23′. Jaundice on fifth day.

12. Male (quick but violent labor). In vag. 2′, navel 7′, umb. 11′.

13. Female. Vag. 2′, navel 5′, umb. 15′. (*At the navel*, means within an inch of the umbilicus).

14. Male. In vag. 2′, near navel 18′, in umb. 22′.

15. Twins, first one Female, born at 5 A.M. In vag. 2′, navel 11′, umb. 20′.

16. Second one born at 6 A.M., Male. In vag. 3′, near navel 8′, umb. 12′.

17. Female (forceps). In vag. none, near navel 8′, in umb. 16′.

18. Male. In vag. 7′, near navel 9′, umb. 12′. Placenta delivered at 7′.

19. Male (weak child). In vag. none, near navel 8′, in umb. 12′.

20. Male. In vag. 3′ (placenta delivered naturally in 15′), near navel 23′, umb. 27.

21. Male. In vag. 5′ (placenta came in 6′), near navel 8′, in umb. 11′.

22 Female (face presentation, produced cephalic version). In vag. 25′ when placenta came, near navel 30′, in umb. 35′. When the child was lying quite still, the pulsations were only 80; on crying, would go up to 140; if again quiet, would run down to 80; but made to cry again it would run up away above 100.

23. Female. In vag. 2′, navel 5′, umb. 10′.

24. Female. In vag. 2′, navel 20′, umb. 25′. Placenta came in 10′.

25. Female (eight hours labor, ether and chloroform). In vag. 2′, navel 13′, umb. 20′.

26. Male. In vag. none, near navel 6′, umb. 10′.

27. Female. In vag. none, navel 6′, umb. 11′.

28. Female. In vag. 2′, near navel 4′, umb. 6′.

29. Male. In vag. 4′, navel 10′, umb. 12′.

30. Female. In vag. 11′, navel 19′, umb. 24′. Pulse in the umb. 133 in a minute when it ceased in the cord.

31. Female. In vag. 13′, near navel 20′, in umb. 25′.

32. Male. In vag. 10′, near navel 12′, in umb. 17′.

33. Male. In vag. 5′, near navel 25′, in umb. 30′.

34. Female. In vag. 10′, near navel 18′, in umb. 23′.

It will be observed here that in the thirty-four cases, two were attacked by jaundice. Dr. King speaks of this disease being frequently caused by the blood not being permitted to run *from* the child, by the umbilical vein (an impossibility), a congestion of the liver being the result of the blood being kept in the child's body (as was done in all those cases), and yet only one in seventeen was affected here. I have spoken to persons about the cord pulsating after the delivery of the placenta; they considered it an impossibility, and yet you may see that such was the fact in several of the above cases.

The above remarks were not intended as a "strictly" complete review of the paper of Dr. King, but it is not unlikely that, if he should not publicly renounce the errors in his essay, I shall, ere long, make a "strictly" careful review of it, according to my "manner of understanding English." In conclusion, allow

me to say, that I read with great interest and accept most thankfully whatever is new and valuable in our profession, but at the same time I am not willing to give up the grand, old, unchangeable truths taught by Physick and Horner, one of which is that the blood flows *from* the placenta *to* the child, through the umbilical vein, and from the child to the placenta by way of the umbilical arteries, and not, as now asserted by Dr. King, in the opposite direction.

Hospital Reports.

PHILADELPHIA ORTHOPÆDIC HOSPITAL AND INFIRMARY FOR NERVOUS DISEASES.

1701 *Summer St., Philadelphia.*

Service of Drs. Morton and Goodman.

[REPORTED BY DAVID DAVIDSON, M.D., RESIDENT SURGEON.]

Case I.—Ida E. F., aged 7, applied for treatment at Dr. Morton's out-door clinic February 26, 1872. No family history of importance. The child has always been rather delicate; noticed about a year from date a slight lameness in right limb; she was then thought to be suffering from hip disease, and so treated by her physician for some time. Tinct. iodine was applied over the hip with constitutional remedies. Four months later, bulging of right breast, with slight spinal curvature, was noticed; the child suffered little or no pain, but the slightest exertion would cause extreme fatigue.

On examination there were no signs of any hip trouble; had considerable swelling on inner side of groin and abdomen; the lower dorsal and lumbar vertebræ presented lateral curvature to the right, and immediately above the crest of the ilium a soft, circumscribed, fluctuating tumor was found, and pressure on this or the contiguous vertebral bodies produced pain. There was also a feeling of deep fluctuation along the psoas muscles.

Treatment. In order to support the spine and relieve pressure, a spinal brace was ordered, which extended well over the pelvis. The lacto-phosphate of lime and cod liver oil, (Trinder's Prep.), tablespoonful three times a day, milk punch; and iodine ointment to be well rubbed over the abscess three times a day.

April 4th. Swelling disappearing about the spine and groin, and the general health better.

July 1st. Has been wearing apparatus steadily; no pain; can walk a considerable distance without fatigue; all evidence of abscess vanished; continue lacto-phosphate of lime and cod liver oil.

Complete Osseous Anchylosis of Both Hip Joints, with Angular Deformity, following Morbus Coxarius—Operation and Relief.

Case II.—George W., aged 14, admitted to Hospital February 20, 1872. Father killed in the army; has mother and four sisters, all healthy. When six years old had a severe attack of hip disease with abscess, which was lanced at the time by their family physician; several fistulæ afterwards formed. Three years later fell down stairs and injured his hip severely. No further history could be obtained.

On examination there was found complete osseous anchylosis of both hip joints; the right thigh and leg were thrown across to the left side, so that the popliteal space of the right just covered the left patella. There was also excessive talipes equinus. The left hip joint presented firm anchylosis, but the limb was quite straight. The locomotion of the lad was so much impaired, that it was determined to straighten the right leg, and, if possible, to produce a false joint. After etherization, the adductor tendons were divided, and when force was applied, the neck of the femur fractured and the limb was readily brought into position. The tendo-Achilles was also divided, and the malformed foot rectified. An extension apparatus was then applied, the weights to be increased daily. This was continued for four weeks, when the lad was allowed to be up, having a steel and leather brace applied, such as is used for paralysis.

May 1. Left hospital able to walk, the great deformity and impediment to locomotion being removed.

Marked Lateral Curvature of Spine.

Case III.—Lizzie J., æt. thirteen years, applied for treatment at Dr. Goodman's out-door clinic, January 8, 1872. Father died from phthisis; mother healthy. Patient delicate from birth; early became accustomed to using left side more than the right; mother noticed sixteen months previously a lump on left side of spine, which has constantly grown larger; has all the symptoms of lateral curvature; pain over abdomen; elevation of shoulder; any stooping movement causing pain, and walking attended with extreme fatigue; general appearance miserably strumous.

Treatment. Application of Kolbe's spinal support; shampooing of right side; daily exercise on swinging bar; good diet; milk punch and tablespoonful of Trinder's preparation of lacto-phosphate of lime and cod liver oil three times a day. Dr. Goodman uses Mr. Trinder's preparation in nearly all his cases of hip, spinal and other strumous affections with most decided benefit. He finds it less disagreeable, more easily taken, and better digested, than any other similar preparation, building up such patients in a wonderfully short time.

Feb. 12. Wears apparatus with comfort. General health better; no pain; able to walk considerable distance without fatigue; apparatus readjusted.

April 15. Still improving; no pain; continues to wear apparatus with comfort; general health excellent. This class of patients require daily systematic gymnastic exercise, only to be obtained in a well-regulated orthopædic hospital, under experienced attendants. Considering that treatment was carried out at patient's home, the improvement was most satisfactory.

Congenital Talipes Equino-Varus—Cure without Tenotomy.

Case IV.—Frank M., æt. nine months, was brought to Dr. Goodman's out-door clinic, Feb. 29, 1872, suffering from marked double club-foot, of the equino-varus variety. Child had never walked. On examination it was found that the feet could be brought almost into normal position by forced manipulation. Dr. Goodman never performs the operation of tenotomy for club foot when by force the foot can be manipulated into its normal position, but prefers to have such cases treated by forced extension twice a day, bandaging and placing the foot in Kolbe's club foot shoe. Dr. G. thinks this plan of treatment is more satisfactory than when operated on. The mother was directed to bring the child to the hospital daily until she was taught how to manipulate, and bandage, and adjust feet in shoes properly. Kolbe's night shoe, with heel and side screws, were constantly applied.

June 11th. Feet straight; all deformity disappeared; able to stand and walk a little; night-shoes discontinued; strong leather shoes ordered, with steel to support the ankle. Patient discharged.

Medical Societies.

ALLEGHENY COUNTY (PA.) MEDICAL SOCIETY.

The regular meeting of the Allegheny County Medical Society was held on Tuesday, October 15. President George D. Bruce in the chair. The minutes of the last regular meeting were read and adopted. Dr. Cheesman, member elect, signed the constitution and was duly admitted into the Society.

Nominations for officers to serve for the ensuing year, to be elected in January, came next in order.

For President, Drs. Maginni, Shaw and Gilmore. Vice President, Drs. C. B. King, Shaw, Mabon, Gilmore, James King, Benham, Arnholt, and Le Moyne.

Recording Secretary, Drs. Benham and Daly.

Corresponding Secretary, Drs. Galaher and Lang.

Assistant Recording Secretary, Dr. McKelvy.

Treasurer, Dr. N. McDonald.

Censor, Dr. E. A. Wood.

Editorial Department.

Periscope.

The Unfitness of Starchy Food for Infants.

Dr. Sonsino has an article on this topic in the *Practitioner*. He remarks:—

Let us see what is the principal difference of composition between animal food and vegetable food. Partly, that in the latter we find more materials refractory to any digestion; that in consequence a more elaborate power of digestion is needed to obtain the nutriment from it. We find in the one and in the other, albuminous principles, fatty principles, saccharaceous principles; whereas *only starchy principles*, which constitute the principal ingredient of vegetable food, are not at all present in animal food, be it meat or any other tissue, or a product of the animal, as milk or eggs.

Therefore, the same physiological and anatomical arrangement that in infants gives evidence of its being not prepared for vegetable food, supports the conclusion that starchy matters cannot be well digested in infancy, and that there is really in infancy what may be called *a physiological dyspepsia for starchy aliments*.

Another valuable confirmation that starchy matters are not well digested by the infant, we have, lastly, in the very interesting observation made by a Frenchman, M. Guillot, who in the autopsy of a number of infants found a jelly-like substance present in the intestines, which to the test of the tincture of iodine gave evidence of containing a large quantity of unaltered starch.

Having seen how many reasons concur to prove the indigestibility of starch in early infantile life, it is time to speak of the physiological experiments that give support to the thesis which I advocate. But before giving account of my new researches, I must say that some researches upon digestibility of starchy matter in early life have been already made by others, concerning one of the digestive juices, viz. saliva.

Bidder and Schmidt found, on examining the power of saliva to convert starchy matter into glucose, that in some new-born animals that

property is defective. The same physiologists collected some saliva of an infant four months and a half old, and found that this fluid converted the glue of starch into glucose with great difficulty and very slowly. Prof. Schiff, in his lectures on the physiology of digestion, says that the active principle of saliva appears in man only at the age of the first dentition, and confirms all the results obtained by Bidder, who was the first to make researches on this subject.

Curious is the exception found by Prof. Schiff for a single animal, the guinea-pig, the saliva of which, examined in the first week of life, has well displayed the property of converting starch into glucose. But this exception was not found in any other animal, not even of an analogous kind to the guinea-pig, as the hedge-hog.

I insist upon this singularity presented by the guinea-pig, inasmuch as it is coincident with the fact that the same animal at its birth offers conditions of more advanced development than the generality of Mammalia. It is notorious indeed that it is born with open eyes, and very soon is able to run about to search for its food, and to render itself independent of the heat of the mother, and that its process of dentition begins very early. Thus the very exception offered by guinea-pigs allows us to conclude that *in the generality of Mammalia saliva acquires its digestive power over starchy matter only at a degree of development which, in the larger number of the same animals, is not reached at the time of birth.*

But saliva is not the only digestive fluid which assists in the digestion of starchy matter. Pancreatic juice and enteric juice also take part in it. As far as I know, no one has made any researches with the view of establishing whether or not these latter juices possess in new-born animals the same digestive power over starchy matter as in the adult animal. The performance of such researches on pancreatic and enteric juices is really more difficult than that concerning saliva, inasmuch as these juices are poured into the digestive canal, and we cannot therefore collect them in man as we can do with saliva. Thus the direct examination of the same juices can be instituted only in *animals.* But in the same manner as physiologists have established the general digestive property of pancreatic and enteric juices, especially by experiments on *animals,* it appeared to me feasible to elucidate the function of digestion in early life by analogous experiments *on very young animals.*

In making such researches I had the opportunity of availing myself of the advice and co-operation of my friend, the well-known physiologist, Prof. Schiff, who put at my disposal all the means offered by the laboratory in the Museum of Florence.

Prof. Schiff had long before instituted a large number of researches on the action of pancreatic juice in the digestion of adult animals. We had then to repeat them, as far as possible, in the same manner on young and sucking animals, to give them a value for comparison between the digestion of the young and of the adult.

But to estimate the digestive action of pancreatic juice on starch in very young animals, we could not have recourse to the method of obtaining the pancreatic juice by a pancreatic fistula, as the smallness of the viscus in young animals renders the latter impracticable. We had, therefore, recourse to another expedient, which in the young, as in the adult, could be practicable with the same good result.

The process of experiment is the following:—After having killed the animal, the pancreas is immediately drawn forth, and being isolated, it is hashed and reduced to the consistence of pap. This is put in sufficient distilled water, and thus there is obtained a pancreatic infusion which is endowed with the same digestive powers as the pancreatic juice. If we pour some drops of this *fresh* infusion on some glue of starch, and afterwards apply to the mixture Trommer's test, we shall have evidence whether the transformation of starch into glucose has taken place, and therefore whether the pancreas of young animals possesses or not the digestive action on that material as it does in the adult.

We made the experiments with the pancreatic infusion of five sucking animals, *i. e.,* a little dog, five days old; another dog, fourteen days old; a cat, seven days old; and two rabbits, seven days old. The result was, that the fresh pancreatic emulsion of all these animals was incapable of transforming starch into glucose, *even after a long contact,* whereas the same *fresh* pancreatic emulsion of *adult animals* produces the transformation in a very short time indeed, *almost immediately.*

We must add, that if a little transformation began to be detected when the pancreatic infusion was tried a few hours after being prepared, that transformation cannot be attributed to a true digestive action of pancreatic juice, inasmuch as it is well known that many organized matters, and especially those belonging to glandular tissue, upon entering into putrefaction, give rise to a ferment which is capable of transforming starch into glucose as well as pancreatic juice, or saliva, in normal condition can do.

I cannot pass over in silence the fact that researches were made also on *enteric juice,* with the same view of deciding whether the same juice in the young is or is not endowed with the adult. But I must say that these latter experiments were not so conclusive as the above concerning pancreatic juice. In fact, some of them gave us evidence that enteric juice was already endowed with the digestive action on starch in the same young animals in which we had found the pancreas inactive.

Thus our experiments, if they leave some uncertainty as to the enteric juice, allow us to come to a conclusion concerning at least the

pancreatic juice. This conclusion may be expressed in the following words: *Pancreatic juice in dogs, cats, and rabbits in the first week of life, perhaps for some days more, is devoid of any digestive action on starch.*

But can I infer from the above conclusion that the same inability of the pancreas to digest starch in young of the animals above named exists alike in the early life of man?

If the physiologists cannot perhaps accept such an inference as the result of an experimental fact, nevertheless the best founded analogy maintains it, the more so as the animals on which we have experimented are of three different species, two carnivorous and one herbivorous, and as the time of the sucking life in them is much shorter than in infants. But conceding that my own researches do not afford sufficient arguments to establish the incapacity of the pancreas in infancy to digest starchy matter, and that they have only opened a field to new investigations, to demonstrate a presumed fact that would establish a great difference between the digestion of the infant and of the adult, we cannot, however, forget that the inactivity of saliva has been verified directly in infants. Now this alone, and still more added to the result from M. Guillot's observations above referred to, are sufficient to allow us to establish that *in the early life of man, probably till the beginning of dentition, infants offer a true physiological dyspepsia for starchy aliments, caused by the inactivity of one at least—probably of all—the humors that concur in the digestion of those aliments.*

Tests for Petroleum.

Since dangerous oils cause so many accidents, the following note by Prof. CHANDLER, in the *American Chemist*, is worth remembering.

There are two distinct tests for oil: (1) *the flashing test*, (2) *the burning test*, which are often confounded; and when the law or ordinance specifies *the fire test*, there is a doubt as to which of the two tests is intended.

The flashing test determines *the flashing point* of the oil, or the lowest temperature at which it gives off an inflammable vapor.

This is by far the most important test, as it is the inflammable vapor, evolved at atmospheric temperatures, that causes most of the accidents. Moreover, an oil which has a high flashing test is sure to have a high burning test, while the reverse is not true.

The burning test fixes the burning point of the oil, or the lowest temperature at which it takes fire. The burning point of an oil is from ten to fifty degrees Fahrenheit higher than the flashing point. The two points are quite independent of each other; the flashing point depends upon the amount of the most volatile constituents present, naphtha, etc., while the burning point depends upon the general character of the whole oil. One per cent. of naphtha will lower the flashing point of an oil ten degrees, without materially affecting the burning test. The burning test does not determine the real safety of the oil, that is, the absence of naphtha. The standard which has been generally adopted as a safe one, fixes the flashing point at 100° F., or higher; and the burning point at 110°, or higher.

In the English act, and some of the more recent laws of the States of the American Union, the burning test has been very judiciously omitted, as two distinct tests are often confusing, and moreover, the burning test, or point, is not an index of the safety of the oil. More than half of all the samples of oil which have been tested for the Health Department did not take fire below 110° F., consequently they were safe according to the burning test, but only 28 of 736 samples were really safe, all the rest evolving inflammable vapors below 100° F.

The flashing test should, therefore, be the only test mentioned in laws framed to prevent the sale of dangerous oils.

What flashing point should be selected as a standard of safety, is a question on which there is some difference of opinion. The higher the flashing point, the safer the oil. Animal and vegetable oils do not flash below 500 to 600° F., hence it is impossible to have an explosion or any burning accident with a lamp or can filled with such an oil. The flashing point should be somewhat higher than the highest temperature the oil ever reaches in the lamps or cans. Our highest summer temperature does not far exceed 90° F., though a can of oil placed in the sun, or near a fire, might become much hotter.

The point of 100° F. does not seem to me to be high enough to secure immunity from danger, though it may be said that very few, if any, accidents occur with oil which does not flash below this temperature. In some of the laws 110° is fixed as the flashing point, and in one of them, 120° F.

What Some Tea is Made of.

Among some analyses of commercial tea in London, examined not long since, was some called Breakfast tea or Morning tea.

Dr. LETHEBY said he had made a further analysis of the six samples of tea in question, and found that when he had thoroughly exhausted them by the repeated action of boiling water the proportion of soluble matter in them amounted to from a little more than 11 per cent. to 13½ per cent. That extracted from common Congou ranged from 22½ to 27½ per cent. Again the woody matter of the tea ranged from 73 per cent. to a little more than 77 per cent. The woody matter of ordinary Congou ranged, according to his experiments, from 59½ to 65 per cent. The proportion of the active principle of the tea amounted to a mere trace, a fraction that was not weighable, whereas in ordinary Congou it would amount to about 2 per cent. Those results confirmed the opinion he had expressed, that it consists

of exhausted leaves almost entirely, there being a little good tea mixed with it. He was of opinion that it was unsound and unwholesome, for it was not merely exhausted but decayed. He thought it would be very likely to produce derangement of the stomach.

Dr. John Stenhouse, for several years Professor of Chemistry at St. Thomas' Hospital, said he had given great attention to the chemistry of tea; indeed, he had made it his study since 1842. He had examined the samples of the six chests, and had carefully analyzed them. Their color was a brownish black, and the infusion had a nauseous odor. There was scarcely any odor of good tea in them at all. The result of his examination was that the tea had gone through some process of putrefaction. He first tried it to find how much extract it would yield to boiling water, and after thoroughly exhausting it he found that it yielded about 13¾ per cent. of soluble matter. He found in it one three-hundredths of 1 per cent. of theine, instead of 2 per cent. It would require 65 lbs of that tea to yield as much theine as 1 lb. of sound Congou. He thought this tea unwholesome; at any rate, it would not have the beneficial effects that sound tea would have. It was not fit for human food.

Children; their Diseases and Treatment.

The following is from an address by Dr. MATTOCKS, in the *Transactions of the Minnesota State Medical Society*:—

A very common error we often fall into is the generalization of the diseases of children, for instance, the treatment of teething, and its many complications, as a special disease.

This brings us to a brief consideration of the treatment of children.

Advanced medical science advises but little medicine in the treatment of children. Advanced ignorance admits no medicine at all. As a general rule the acute endemic diseases of infancy are traceable to some known cause; such as scanty or improper food—else exposure to the changes and vicissitudes of the weather; or, to put our proposition differently, adult diseases occur, children's sicknesses are caused. Taking this view of the case, the indication would be to protect children from the ignorance of their nurses, to demonstrate to them, if possible, the cause of the present attack, that they may in the future be on their guard against similar exposures.

In our *practice* with adults, we often neglect to trace out the cause of their disease. In many instances it is unnecessary. With children, however, the case is very different. Here we must find, oftentimes, our indication for treatment from the cause of the disease. For instance, in diarrhœa. With the adult, the simple fact of diarrhœa may be sufficient. Our duty is to check it. With the infant, on the contrary, we must know what caused the diarrhœa, whether it be irritating food, an insufficiency of food, or whether it be simply the result of reflex irritation.

The diarrhœas of childhood, as a general thing, are the result of improper food. This leads to the inquiry, what is the proper food for an infant. It is certainly strange that we should ever find it necessary to ask this question, what food shall we give a baby? Give it milk, of course—breast milk, if possible, if not, good cow's milk. But are you sure about this, you ask—better men than you have advised differently. Another says, I have fed my children with an artificial preparation, and they thrive on it. Yes, says another, and even better than upon breast milk. To this we answer, we have seen children thrive in squalor, filth, and exposure, but where one has lived through this ordeal of uncleanness, a dozen have died by reason of it.

Most of the writers upon the diseases of children, and all the discoverers of artificial food for infants, dwell in large cities where it is impossible to obtain good cow's milk, and rather than use an impure article, they are forced to resort to other means.

It does not necessarily follow, however, that because Prof. Meigs has found it necessary in Philadelphia to modify the diet of his little patients—when good food cannot be readily obtained—that you and I must do the same, living in a land where good milk is abundant, any more than we should send our sick babies to Fairmount Park, in Philadelphia, because the physicians of Philadelphia do it. Because Baron Liebig found it necessary to compound a food for his little grandson, must we use the same for everybody else's little grandsons? If good breast-milk cannot be obtained, I think we should establish a rule that good cow's milk, properly diluted, should be its substitute—that is, if good cow's milk can be obtained, of course insisting that milk from one cow should be used. In some instances, few we think, this food does not seem to agree with our patients; perhaps we do not sufficiently dilute it, or may be the milk is not fresh (we should bear in mind that nature furnishes the infant milk fresh from the breast), or that the utensils are not clean, or some other reason may exist, which patient and judicious investigation might remove.

A few pages might be spent with fitness in discussing the clothing of children, or rather the want of it. The physician is culpable who does not attend to the clothing of his little patients, or rather call the mother's attention to the matter, from time to time.

We remarked that the diseases of children were not necessarily peculiar. This is true of the treatment of children. They must be treated symptomatically. It seems to us that children suffer more than adults when sick, just as nervous people suffer more when sick, than the phlegmatic. Besides, the alimentary canal and the brain seem to be the seat of diseases more often with the little ones, and our personal experience teaches us that where either the one or the other is involved, much suffering ensues.

Arsenic as a Prophylactic in Rabies.

Dr. ERNEST GUISAN, in an inaugural dissertation presented to the faculty of Berne, quoted in the *Practitioner*, states that though he has arrived at no positive conclusion, he believes that, as in cholera, the germ of the contagion in rabies is formed by one of the lowest fungi. The period of incubation extends, upon the average, over five or six weeks The poison is then absorbed, spreads itself through the body by means of the circulation, and then multiplies indefinitely, producing ultimately irritation of the nervous centres, and especially of the medulla oblongata. Dr. Guisan then enters into the prophylactic treatment of the disease by means of arsenic, and gives the following clinical observations:—"A man was bitten on the 24th of June by a mad dog, in the hand; a girl was bitten at the same time, and shortly after died from hydrophobia. Two days after the accident the man applied to Dr. Guisan's father, who cauterized the wound deeply with potash, and kept the wound open with cantharides. Minute doses of belladonna were given morning and evening up to the 18th of July, when the patient had rigors and pains in the body. From this time, up to the 26th of July, the symptoms of hydrophobia became gradually more and more expressed in spite of repeated venesections and the use of calomel and opium. At this date, however, small doses of arseniate of soda were prescribed every four hours (0·003 of a gramme). On the 27th, marked amelioration of the symptoms was observed, which continued till, on the 30th, all danger had passed and complete recovery took place." Dr. Guisan gives another case in which a rabid dog, between the 7th and 9th of June, bit thirteen persons in various towns of the canton of Freiburg. All were recommended to be treated with one-twentieth of a grain of arsenic morning and evening, as a prophylactic measure. Eight submitted to this prophylactic measure, and none were affected. Four declined, or were not allowed, to take the arsenic. Of these four, two remained unaffected, and two died. One began the arsenical treatment, but speedily left it off. She was attacked, but at a much later period, and died. Dr. Guisan not only recommends the internal employment of the arsenic, but that the wound should be dressed with it.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

——Prof. J. F. MINER, of the University of Buffalo, has for three years been advocating Ovariotomy by the method of enucleation. He simply separates the tumor from its attachment to its pedicle by careful and patient efforts. No hemorrhage requiring ligatures occurs, and the whole cumbersome apparatus of clamps, ligatures, etc., is dispensed with. This, we are convinced, is the true and only theory for such operations, although exceptional cases will require the old procedure. Prof. Miner's articles can be found in the Buffalo *Medical and Surgical Journal*, June, 1869, and the *American Journal of Medical Sciences*, October, 1872. The latter is also published in pamphlet form.

——Dr. J. G. RICHARDSON'S *Report on the Structure of the White Blood Corpuscle*, published in the *Transactions of the American Medical Association*, has also appeared in pamphlet form. We briefly referred to his views in a notice of the *Transactions*.

——"*Diagnosis; A Story for Amateur Physicians as well as Regular Practitioners*," by Duff Childs, is a medical novel which may interest some readers. (Louisville, A. A. Gosnell. Price $1.00). After one or two efforts we have not been able ourselves to become sufficiently interested in it to read it very thoroughly, but the portion exposing the absurdities of certain doctrines of Hahnemann struck us as pointedly expressed and deserving of general perusal.

——Mr. DARWIN'S forthcoming work, on *Expression in Man and Animals*, bids fair (says *Nature*) to be of a more popular character than any of his other publications. It will commence with a statement of the general principle of Expression: that serviceable actions become habitual in association with certain states of the mind, and are performed, whether or not of service, in each particular case. This will be illustrated in the case of expression of the various emotions in man and the lower animals. The means of expression in animals will then be discussed, and the special expressions of animals and man, such as the depression of the corners of the mouth in grief, frowning, the firm closure of the mouth to express determination, gestures of contempt, the dilatation of the pupils from terror, the causes of blushing, etc. In conclusion, the bearing of the subject will be spoken of on the specific unity of the races of man; the part will be discussed which the will and intention have played in the acquirement of various expressions; and the question of their acquisition by the progenitors of man will be referred to. Seven heliotype plates, reproduced from photographs, will illustrate the work.

——The *American Public Health Associa-*

tion have published an organization and constitution, setting forth the objects of the Society and a list of the members. If this Association is faithful to the principles upon which it starts out, it will become a national benefit.

——The *Annual Address of the Retiring President of the State Medical Society of Ohio*, Dr. W. W. DAWSON, has been republished in pamphlet form. It is principally on medical instruction.

——The *Annual Address before the Medical Society of the State of Alabama*, by Dr. T. C. OSBORN, has also been sent us. It treats of the suppression of quackery, the formation of aid societies, reception of students in private offices, etc.

BOOK NOTICES.

Transactions of the Medical Society of the State of Pennsylvania, at its Twenty-third Annual Session. Vol. ix, Part i. Published by the Society. Philadelphia, 1872. 1 vol., pp. 263.

The contents of this volume are rich in the results of practical experience, and well represent the condition of the public health during the year in this Commonwealth. Instead of giving a list of the reports it contains, we shall merely call attention to several extracts of interest which we have marked in its perusal, and which will give a general idea of its quality.

The Address on Obstetrics is a most excellent practical essay on the use of the speculum in the diagnosis and treatment of diseases of the uterus, by Dr. WASHINGTON L. ATLEE. Written by a master hand, it deserves the most careful study. We hope it will be published in pamphlet form to insure a wider distribution. On page 112, Dr. CRAWFORD, of Delaware County, describes a most severe case of anthrax conducted to a successful termination in a very creditable manner.

A striking instance of very serious symptoms, mistaken for phthisis, produced by an elongated uvula, is described by Dr. James A. Brush, of Mercer County, on page 129. Such examples merit bearing in memory. The report of the Montgomery County Medical Society, by Dr. HIRAM CORSON, contains a large amount of information on small-pox and its treatment, scarlet fever, measles, and notes on ligation of the funis, which we reproduce elsewhere in part.

The County Societies were pretty well represented at the meeting, and we believe the aims of the organization are better understood by the profession throughout the State. This is as it should be, and we hope the spirit will increase.

A Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits. Illustrated by numerous Cases and Engravings. By William Roberts, M. D., etc. Second American from the Second Revised and considerably enlarged London Edition. Philadelphia, Henry C. Lea, 1872. 1 vol., 8vo, cloth. pp. 616.

It has been now some three years since the first edition of this work was exhausted, and the delay in the appearance of a second has been owing to the desire of the author to render it as perfect as possible. The plan is the same, but the text has been thoroughly revised, and new articles on suppression of urine and paroxysmal hæmaturia have been inserted.

The author, after some introductory pages on the methods of examining the urine and the changes it undergoes by keeping, proceeds to speak of its physical properties, its odor, color, density, quantity and reactions. A chapter is then devoted to the chemical constituents of the urine and its various inorganic deposits in the natural state. Abnormal deposits and substances are next considered, including albumen, spermatozoa, sugar, vegetations, etc.

The second part discusses those diseases the chief character of which is an alteration of the urine. These include diabetes, insipidus and mellitus, gravel and calculus, and chylous urine. The third and last part embraces organic diseases of the kidneys. Several chapters are devoted to a very thorough exposition of Bright's disease. In reference to its etiology the author strongly maintains the view that the constant use of alcoholic liquors is a fertile cause. Pyelitis, pyonephrosis, hydronephrosis, cystic degeneration, cancer and tubercle of the kidneys are also treated at length. The work closes with chapters on the curious entozoa of the kidneys and on the equally curious anomalies occasionally found in their position, form, and number. A good index and carefully selected lists of the leading works on these topics are also found in the book.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, NOV. 9, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

VITAL STATISTICS OF THE UNITED STATES.

It is much to be regretted, in the interests of science, that so little accuracy is found in the biological statistics of our country. In the passionate straining for wealth, in the subordination of all pursuits whose purposes are remote to those of immediate utility, in the ignorant adulation of the practical in preference to the abstract parts of science, we shall lose heavily in the long run. Vital statistics, except in a few cities, and one or two States, are deceptive and vague anywhere in the United States, and whatever show of perfectness they present are to be received with great deliberation.

Dr. J. M. TONER, of Washington, has attempted to utilize the various census reports, with a view of arriving at some general results with reference to the population of the United States. His essay is contained in the circular of information published by the United States Bureau of Education last March. It is illustrated by diagrams, to one or two of which we have already called attention in these pages. As representing to the eye that which columns of figures more slowly and inadequately bring to the comprehension of the mind, this method possesses great advantages.

One of these diagrams shows the whole population of the United States, and the population of males and females of the same age, according to the census of 1860; a second illustrates the ages at which an excess of one sex over the other exists in the different States; a third shows the proportion of white children of both sexes under fifteen years of age to the 1000 white females between fifteen and fifty years, the nubile age, in each State, at every decade from 1800 to 1870.

This latter, we are informed, was "devised and constructed to illustrate graphically the decline of the birth-rate in the United States." Once before we spoke of this table, and expressed the hope that this *apparent* decline was not misinterpreted by the author of the table. In this we fear we were wrong; for although Dr. TONER expressly says that he "does not propose to adopt anything or to attempt to explain this extraordinary condition," yet almost in the next line he goes on to say, "the American people, in this particular, are showing unmistakable signs of physical degeneracy," and refers in laudatory terms to Dr. ALLEN, of Lowell, on the subject. Dr. ALLEN is known as an extreme and illogical advocate of the physical degeneracy views, and we have on several occasions pointed out wherein he errs in his sweeping denunciations. Dr. TONER does not seem to think that, granting the facts he sets forth, there are other more likely and more agreeable explanations of them, resulting from immigration, etc., as heretofore indicated in these pages.

Nothing is more readily misinterpreted than statistical data. We observe that even Mr. HAVILAND, whose studies of the British Registrar General's returns have commanded so much admiration of late, has been rather severely and apparently justly criticised for some of his deductions. Hob-

by riding nowhere finds a freer field, and nowhere is there a more urgent need of absolute avoidance of prejudice, than in deducing the exact significance from statistics of vital events.

Notes and Comments.

Festina Lente.

An English contemporary says with great truth, it not unfrequently happens that a man, disgusted with the defective sanitary arrangements of the generality of houses, ancient and modern, builds a dwelling for himself and his family, constructed with all the latest improvements, and in his extreme anxiety to commence a career of longevity, rushes into it before the workmen are out of it, and while the walls are still saturated with moisture. The consequences are, as might have been expected; in addition to the architect's charges, the rash owner is called upon to pay within the first few months a further bill to the doctor, and too often to the undertaker also.

The Localization of Brain-Functions.

Meynert, says the *British Medical Journal*, one of the ablest of the modern students of the anatomy of the nerve-centres, has sought, by combining phrenological with clinical and pathological observation on the functions of the cortical layer of the cerebral hemispheres, to define to some extent the localization of the different functions in the gray matter of the cortex. He distinguishes five special functional centres. 1. The olfactory lobe or nerve, which, highly developed in animals well gifted with the power of scent, is almost atrophied in man, less highly endowed in this respect. 2. The walls of the fissure of Sylvius. These are in intimate relation with the power of speech, as is found in aphasia, which is the consequence of changes in them. 3. The occipital and temporal lobes. Anatomy shows the relations of these parts with the organs of the senses, the retina, labyrinth, and olfactory nerve. In cases of blindness and deafness rapidly developed, these lobes are the seat of evident alterations. The experiments of Flourens on the ablation of the cerebral lobes support this theory; for, if but little of the substance be removed, the senses are not much affected; but, if the ablation be carried deeper, the sensorial functions immediately cease. 4. The frontal lobes. These lobes are the principal seat of motor excitation, as is shown by their anatomical relations with the corpora striata. Besides, in the forms of psychoses which are accompanied by extensive disorders of the motility (general paralysis), these are the most atrophied of all the parts of the brain. The continued need of movement, the agitation of mania, are equally based upon change in the frontal lobes. 5. The cornu of Ammon. This organ plays an important part in the functions of motility, and almost always presents, in epilepsy, conditions of atrophy or sclerosis.

Mercury in Syphilis.

The editors of the *Gazette des Hopitaux* say:—To us it is beyond doubt that mercurial preparations, properly administered, shorten the duration not only of the secondary accidents, but even of the tertiary, which have resisted iodide of potassium administered alone. As to the choice of the mode of application, Sédillot's pills have appeared to us as efficacious and more agreeable to take than bichloride or the hydrargyric iodides. We know that each of these pills contains double mercurial ointment, 10 centigrammes; medicinal soap, 10 centigrammes; marsh-mallow powder, 10 centigrammes. They are daily prescribed by M. Richet, M. Hardy, and others. By giving these concurrently with iodide of potassium, and disusing them from time to time, so that they can be alternated with a draught containing chlorate and nitrate of potassa, they can be continued for months without producing either salivation or fatigue of the digestive canals. This is an excellent plan of treatment when one is anxious that certain accidents menancing existence, such as intracranial tumor, should rapidly disappear.

The injection of bichloride of mercury in the treatment of syphilis finds a warm advocate in Dr. Staub, of Strasbourg (*Traitement de la Syphilis*), who specially recommends the albuminous solution of the sublimate. This is not acid, and does not produce coagulation in the tissues. His formula is the following: Bichloride of mercury, 1.25 gramme; chloride of ammonia, 1.25 gramme; chloride of sodium, 4.15 grammes; the white of one egg; distilled water, 250 grammes. One centigramme of this is injected daily, by a subcutaneous syringe, in two injections, one in the morning, the other in

the evening. According to this somewhat enthusiastic author, bichloride so administered is an invaluable therapeutic agent, infallible in the treatment of secondary symptoms, prompt, complete, and devoid of inconvenience.

An Old Remedy for Hydrophobia.

Old remedies are sometimes as good as new ones; and if they have been forgotten by the profession there is just as much merit in bringing them forward as in discovering a novelty. Mr. C. Leeson Prince quotes in the *British Medical Journal*, Oct. 19, from the *Transactions* of the Royal Society for 1685, a note by Mr. George Dampier, praising "a most Noble and Infallible remedy" for hydrophobia. It is the *Lichen cinereus terrestis*, of Ray. This Mr. Prince believes to be the efficient constituent in a secret remedy, which certainly, from his account, has been remarkably successful near Nottingham, England.

We should like some of our readers who are better botanists than ourselves, to inform us of the proper botanical name corresponding to Ray's classification of lichens. Dampier says that it "grows on the ground as close as may be to it, being flat on it; the moss and grass groweth up about and amongst it. To use it, you must dry it in an oven, by the fire, or in the sun, then powder it and pass it through a fine sieve; the which, mixed with the like quantity of fine beaten and powdered pepper, is the composition."

Mr. Prince calls it *liverwort*, but the liverwort of our books, the *Hepatica Americana*, does not answer this description.

The Malign Influence of the Stars.

To cast the horoscope of public health, and read the signs of coming pestilence, blight, famine, and general woes, by perusing the starry vault, calculating the conjunctions of the planets, and this, in a literal sense and sober earnest, is an astonishing plan to defend and advocate in these days; yet a physician of venerable years, Dr. M. L. Knapp, of Mexico, has a long article in the *New York Medical Journal* for October, intended to show that the planetary influences mainly control epidemic visitations and the blights of vegetation. He makes some efforts to explain this on scientific grounds, but *credat Judæus Apella, non ego.*

The Impurity of Seidlitz Powders.

This point was discussed before the last meeting of the American Pharmaceutical Association by Mr. C. W. Grassly, of Chicago. He disclosed the fact that (in many cases intentionally, in most cases from want of proper care), nearly all the samples of Seidlitz powders examined fall below the weight of the U. S. P. standard. In those cases where intentional, there is no excuse, as that is done without any pretence at accuracy; but in the majority of stores the powders are put up by measures which are inaccurate, or soon become so. Even with the most careful persons, it is impossible to fill these measures uniformly, and if the measures were originally correct, they soon, by attrition, wear away and lose their accuracy. Weighing, and giving just weight, is the only remedy. Another source of error in measuring is, that various lots of Seidlitz mixture may vary a little, owing either to fineness of powder, moisture, or compactness of the powder. No ingredients were found as adulterants.

It was stated in the discussion that in London, many years ago, under the name of "Improved Seidlitz Powders," it was customary with certain stores to add one grain of tartar-emetic to each box of powders, and that in a very few stores in this country the same practice was observed.

Dr. Wilks on the Universal Use of Chloral.

This eminent teacher, in his late address before the British Association, indulged in the following sarcastic remarks:—

In the history of the world we see savage nations attempting to exorcise particular pains, having, of course, no knowledge of their cause. At a later period, symptoms are treated; but in proportion to the advances of medicine as a science, is the attempt at a wider generalization being constantly made. If scientific treatment had been at the present day in any way perfected, how were it possible that, within a few years, bromide of potassium, carbolic acid, and chloral, should become in turn universal medicines? If any fact were required to prove the absence of scientific system in the treatment of disease, it would be the universal administration of chloral; every patient has some bodily uneasiness, or is sleepless, and thus presents symptoms suggesting its use. It is a powerful benumber; but benumbing the sensi-

bilities and paralyzing your patient is not curing his complaint. If a man be raving mad, and you knock him down and stun him, he will be quiet, and you may praise highly the dose which you have given him. The practice might thus be developed into a valuable therapeutic agent, and a trained boxer might give blows on the head of different degrees of force according to the strength of the dose ordered by the prescriber. The method would hold rank with the universal administration of chloral, and, in the hands of an expert, might, perhaps, be more safe.

The Chemistry of Tanning.

Distinguished German professors have claimed that tanning is not a chemical but a mechanical operation; that there is not an actual chemical union between the tannin and gelatin, but that the tannin simply makes a minute coating and preservative of the particles of the gelatin and fibrin of the hide; this theory has not, however, met with any general acceptance, although it seems to have some confirmation in the fact that the tannin can sometimes be entirely washed out of hides and skins which have been quickly tanned with terra japonica; there seems to be also, further proof of its correctness in the fact that, by a recently-discovered process, a firm in Paris is now engaged in making glue out of old boots and shoes. We have not sufficient particulars to be able to state exactly what has been done, but we are assured that the operation is a success, that old boots and shoes to be used for this purpose have now a standard price, and that a good article of glue is made from them.

Injection of Ammonia in Opium-Poisoning.

In the *Glasgow Medical Journal*, for August, 1872, Dr. McEwen reports a case of opium-poisoning. Ammonia injected into the veins of the arm restored consciousness to an old man of sixty-nine, who was apparently moribund from a poisonous dose of opium (forty grains) eight hours previously. He was so far recovered as to be able to walk a quarter of a mile to the hospital. After admission there, at 8 A. M., the ammonia injection was not repeated, but three doses of croton oil were administered, and coffee. In the afternoon he became somnolent, and sweated profusely. Belladonna was administered, and a further dose of croton oil; and at 8.25 he died. The effect of the ammonia was so admirable, that it is to be desired that in any other case it should be repeated, as Dr. Halford recommends, to combat relapse.

The Action of Antimony.

From a series of experiments on frogs and other animals, Dr. Radziejewski, of Berlin, comes to the following conclusions in regard to the action of Antimony.—1. The emetic effect of the tartrate of antimony introduced into the stomach is the result of the action of the drug on the mucous membrane of the stomach, and not of its absorption into the blood. The effect of the peculiar irritation of the stomach produced by the substance is, by reflex action, to produce vomiting. 2. The depression of the action of the heart is also a result of reflex action, and not, as some have supposed, a special result of the action of the potassium contained in the tartrate. 3. Antimony has, in addition to its effects on the intestinal canal, also a general action on the organism corresponding to that of arsenic.

The Os Uteri lost in Labor.

A letter of Dr. E. Kennedy, in *The Doctor*, contains the following extraordinary case:—

A patient in her third labor, which was somewhat violent, had slight hemorrhage. The head was well engaged in the pelvis, and some fleshy mass was found to protrude from the vulva. The pains increasing, a complete circular ring, about three-eighths of an inch thick by an inch in breadth, escaped, which, on examination, proved to be the detached os uteri in its entirety. The labor proceeded rapidly. There was very little hemorrhage; and the patient made a favorable recovery, the lochial discharge continuing longer and being more offensive than usual. Of the after-history of this case, and whether she bore more children, I am ignorant.

MARRIAGES.

Craig—Carey.—Oct. 16, at Lime Springs, Iowa, by the Rev. A. Craig, Norman S. Craig, M. D., of Lansing, and Miss Alice S. Carey.

Hawkins—Hart.—Near Rocky Comfort, Arkansas, Oct. 16, at the residence of the bride's sister, by Rev. P. G. Jenkins, W. H. Hawkins, M. D., and Mrs. Dora V. Hart, both of Rocky Comfort, Arkansas.

Moore—Pigman.—At the residence of the bride's father, New Richmond, Ohio, Oct. 23, by the Rev. H. A. Ketchum, of Portsmouth, O., Dr. E. C. Moore, of Detroit, Mich., and Miss Laura O. Pigman.

Sterling—Eldridge.—In this city, Oct. 31, by Rev. T. W. J. Wylie, Dr. John Sterling and Miss Mary D. Eldridge.

DEATHS.

Stewart.—In Pittsburg, Pa., on September 26, of pulmonary hemorrhage, W. W. Stewart, M. D., of Dayton, O, aged forty-six years, five months and twenty-two days.